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Tenth Session of the Leather and
Leather Products Industry Panel

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REPORT*

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PREFACE

1. The Second General Conference of the United Nations Industrial Development Organization (UNIDO), held at Lima, Peru, in March 1975, and subsequently endorsed by the United Nations General Assembly, recommended that UNIDO should include among its activities a system of continuing consultations between developed and developing countries with the object of raising the developing countries' share in world industrial output through increased international co-operation.

2. In May 1980, the Industrial Development Board decided to establish the System of Consultation on a permanent basis, and in May 1982 it adopted its rules of procedure (The System of Consultations, PI/84) setting out its principles, objectives and characteristics, notably:

- The System of Consultations shall be an instrument through which the United Nations Industrial Development Organization (UNIDO) is to serve as a forum for developed and developing countries in their contacts and consultations directed towards the industrialization of of developing countries;

- Consultations would also permit negotiations among interested parties at their request, at the same time as or after consultations;

- Participants of each country should include officials of governments as well as representatives of industry, labour, consumer groups and others, as deemed appropriate by each government;

- Final reports of consultations should include such conclusions and recommendations agreed upon by consensus among the participants; the report should also include other views expressed during the discussion.

3. Forty-four consultation meetings have been convened since 1977 covering petrochemical, fertilizer, pharmaceutical, capital goods, iron and steel, agricultural machinery, leather and leather products, vegetable oil and fats, food-processing, industrial financing, training of industrial manpower, wood and wood products, building material, etc.

4. Benefits deriving from this activity include the identification of obstacles to industrial development in developing countries; the monitoring of trends in world industry with a view to identifying action-oriented measures for increasing the industrial output of developing countries; and the search for new forms of international industrial co-operation in North-South and South-South relations, including joint ventures and technical co-operation opportunities.

INTRODUCTION

5. The Leather and Leather Products Industry Panel was created as an advisory body consisting of high-level experts in accordance with the recommendations from the First Consultation on the Leather and Leather Products Industry which was held at Innsbruck (Austria) in November 1977.

6. A total of nine panel meetings were held in ten years the first of which was convened in Vienna in June 1978 and the ninth, in Pécs (Hungary) in October 1988.

7. The terms of reference for the Panel stipulate that the members, a maximum of 20, are to be appointed by the Director-General and confirmed by the Industrial Development Board, giving due consideration to the geographical distribution and technical competence of the members. The Panel has a strong representation of experts from the leather industry of both developed and developing countries. UNIDO pays for the travel of experts to the place of the meeting, as well as a related daily subsistence allowance (DSA), but no salary or fee.

8. The Panel prepared programmes and issues for the Second and Third Consultations, and for the Regional Meeting in Africa, concentrated on follow-up activities to those Consultations and gave the UNIDO Secretariat and other international organizations specific tasks to accomplish prior to each ensuing Panel meeting. It also gave directions on the plan of action for UNIDO.

9. The membership of the Panel has been partly changed from time to time.

10. The nomination and acceptance procedures for new members are not excessively formal. Proposals are made by the UNIDO Secretariat. The Panel has been an excellent tool for mobilizing participation of industry and industrial associations in consultations, as well as for improving co-operation between UN agencies.

11. Through sound advice the Panel has been instrumental in achieving positive results through UNIDO. The role of the Panel is now much wider than just a steering committee for consultations; it has become an advisory body for all UNIDO efforts in the leather subsector.

12. During the ninth session of the Panel, the UNIDO Secretariat presented a concept for an integrated programme in the treatment of tannery effluent in selected South-East Asian countries. After a constructive discussion, it was concluded that UNIDO should continue its efforts in tannery effluent treatment and further develop the concept with particular emphasis on optimum utilization of by-products. It was also suggested that the technology used and experience gained in the successful UNIDO project in Brazil should be utilized and disseminated. The members of the Panel expressed their great concern on effluent treatment and environmental protection.

13. The objectives of the tenth session of the Leather and Leather Products Industry Panel were as follows:

- To evaluate the actions undertaken in the implementation of the conclusions and recommendations of the Third Consultation, and the Eighth and Ninth Panel sessions;

- To provide UNIDO guidance and support for an elaboration of strategies for carrying out technical co-operation programmes in the leather sector, with emphasis on effluent treatment and environment protection in South-East Asia.

- To prepare conclusions and recommendations on strategies for carrying out technical co-operation programmes in the leather sector for implementation by UNIDO as well as governments' policy-makers, industries, financial institutes, and international organizations;

- To draw up technical assistance and investment project ideas for follow-up by UNIDO and other organizations.

I. ORGANIZATION OF THE MEETING

14. The 10th Session of the LEATHER AND LEATHER PRODUCTS INDUSTRY PANEL was held in Madras, India, from 4 to 8 November 1991 and was jointly organized by the UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO) and the CENTRAL LEATHER RESEARCH INSTITUTE (CLRI). The meeting was attended by 12 panel members out of a total of 38 participants from 13 countries and 5 UN specialized agencies. The list of participants is attached as Annex I.

Opening of the Meeting

15. The Director of CLRI welcomed the members of the PANEL, representatives from UN specialized agencies and observers from India. In his opening speech, he emphasized the importance of international co-operation in the field of leather-related industries and the role of technical assistance provided for developing countries through bilateral and multilateral programmes. He also referred to results achieved by some institutions established in the developing countries. In particular, he introduced the improved capabilities of CLRI with special references to automation of leather processing, developing of chemical processes in tanneries, use of Computer Aided Design (CAD), energy conservation and human resources development. Finally, he drew the PANEL members' attention to the potential of some institutions in developing countries which is readily available for execution of technical assistance in their region.

16. *The representatives* from UNIDO's SYSTEM OF CONSULTATIONS DIVISION introduced the new members of the PANEL, *Messrs. Clothier, Hernandez, Lawal and Torielli*. Special thanks were expressed to all parties who helped in the preparation of the present session of the PANEL - with special references to CLRI and the UNDP (UNITED NATIONS DEVELOPMENT PROGRAMME) OFFICE in New Delhi. He highlighted the main issues to be addressed by the meeting and wished success to all participants.

17. A UNIDO staff member greeted *Mr. G. Reaks*, the only member who has participated in all 10 sessions of the PANEL.

Election of Chairman

18. *Mr. S. Sen*, President of the INDIAN LEATHER TECHNOLOGISTS' ASSOCIATION, was elected as Chairman of the meeting, *Mr. R. Arunga* as Vice-Chairman and *Mr. A. Clothier* as Rapporteur.

Adoption of the programme

19. The programme for the tenth session of the Panel that was adopted is given in Annex II. Annex III consists of the list of papers prepared by the UNIDO Secretariat and distributed to the participants of the meeting.

II. GENERAL DISCUSSIONS ON THE GLOBAL SITUATION

20. A participant from USSR outlined the activities and encouraging results achieved in a number of Soviet tanneries in the use of biotechnology in leather processing. This new approach offers substantially cleaner technology and consequently much simpler and less costly effluent treatment.

21. The representative of ILO (International Labour Organisation) informed the PANEL of the forthcoming tripartite technical meeting to be held in Geneva in February 1992. It was expected that delegates from 24 countries will participate in the meeting. The reports presented will outline the trend of leather industry development during the past five years and deal with the employment situation, working conditions and the competitiveness of the leather industry. Previous meetings have adopted substantial recommendations on the improvement of the working environment which remains a pressing problem of the industry. A manual with practical guidelines on the safe use of chemicals was expected to be published shortly.

22. The representative of FAO informed the PANEL of the completed and planned activities of the Organization's COMMODITIES AND TRADE DIVISION in the field of hides and skins and their derived products. He referred to the on-going work regarding the improvement and up-dating of FAO's global statistical data base, including the reissue of the improved comprehensive conversion factors compendium during the first half of 1992. He also confirmed FAO's participation with UNIDO in the jointly sponsored pilot exercise in some African countries mentioned in paragraphs 35-48. He cautioned, however, against raising too high hopes for radical improvements in view of the excessively complex problems encountered with methodological approaches and their computer adaptation in this commodity field.

23. The representative of FAO also briefed the PANEL on the results of a recent ECDC workshop on trade of hides, skins and their derived products in Africa, held in Zimbabwe in July 1991, to which UNIDO and ITC had made considerable contributions. He mentioned the conclusions reached and recommendations made, including those directed towards African governments and UN agencies, in particular those regarding the *Common Fund for Commodities*. The PANEL also noted that in the course of preparations for and outcome of the ECDC workshop, co-operation between FAO, UNIDO and ITC had strengthened considerably. As a result, there had been a meeting in Rome between the representatives of the three agencies at which guidelines had been developed for the future alignment of work in the leather sector.

24. Finally, the representative of FAO informed the PANEL of the significance of the 3rd Session of the FAO SUB-GROUP ON HIDES AND SKINS, an intergovernmental body, scheduled to meet in April 1992. He mentioned the new function which had been added to the SUB-GROUP's work, after it had been designated as INTERNATIONAL COMMODITY BODY (ICB) by the *Common Fund for Commodities*. This had made the SUB-GROUP the sole body in the sector entitled to sponsor productivity improvement, R&D and market promotion projects to the *Fund* for financing. The PANEL noted that the *Fund* had

recently come into operation and had its headquarters in Amsterdam and capital resources for project funding of about US$280 million. Two projects would be presented to the SUB-GROUP ON HIDES AND SKINS in April 1992 for review and possible sponsoring to CFC. One project covered hides and skins improvement in French-speaking West Africa coupled with R&D activities on replacement of branding, salt in curing, biocides in hide storage and possibly of chrome tanning. The second project attempted to formulate a marketing information and technical advisory scheme, again in support of the African hides, skins and derived products sector, and it was currently under preparation as a joint initiative between ITC and FAO.

25. Representatives of CLRI introduced some of their results achieved recently. The following presentations were made:

i) Technologies, expertise and services available for export *by Mr. G. Thyagarajan*;

ii) Modernization of tannery wet operations - Indian experiences *by Mr. K. V. Raghavan*;

iii) Resource potential and tanning capacity utilization in India *by Mr. K. Seshagiri Rao*;

iv) Video films entitled "Process Controls for Tannery Wet Operations" and "Rural Tanning in India".

III. PRESENTATION OF UNIDO ACTIVITIES

26. A UNIDO staff member from the AGRO-BASED INDUSTRIES BRANCH informed the participants of the activities in the field of leather and natural rubber-related industries carried out by the IO/T/AGRO LEATHER UNIT. It was reported that during 1988 the Leather Unit had worked very actively on developing the large-scale *Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme for East and West Africa*. It was confirmed that the East Africa programme, financed by six donor countries, began operating in mid-1989. The West Africa scheme had to be postponed at present due to a lack of financing.

27. Preparatory phases of several large-scale *environmental projects* are nearing completion. They are expected to lead to large-scale programmes within this sub-sector. These programmes not only deal with effluent treatment of tannery waste, but also aim to reduce effluent output through the application of clean technology. The findings and recommendations of the EXPERT GROUP MEETING on tannery effluent problems and particularly on the new programme designed for South East Asia - which took place prior to the Leather Panel meeting - will be presented later during the meeting.

28. Progress in *software development* for computerized costing and calculation in the footwear, leather goods and in the tanning sectors has continued. The scheduled computerized maintenance system has been prepared and will be installed in Ethiopia shortly. Some delays are being faced in the introduction of a modus operandi to distribute this software on a payment basis.

29. An interesting development is taking place in the *assistance to private factories* within the regional East Africa rehabilitation scheme. Assistance in rehabilitating factories has been provided against payment in local, non-

convertible currencies and these funds have been deposited in trust funds to be utilized for hides and skins improvement activities.

30. As requests received through various UNDP field offices for future UNIDO technical assistance activities should be implemented by adopting the *programme approach*, the leather, footwear, leather and rubber products sector field work is expected to continue to concentrate on the programme approach for activities addressing problems of the entire sub-sector. They should identify links between UNIDO/UNDP and Government-executed technical assistance activities - including international, bilateral and local intervention. At the request of several countries, large-scale programmes are being prepared and work on the Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme is expected to expand.

31. At present the main problem facing the LEATHER UNIT's work is that the large programmes must be administered and managed with very limited resources due to the financial constraints at UNIDO HEADQUARTERS. Therefore, there is some apprehension that the LEATHER UNIT must somewhat reduce its present, ambitious goals so that there is no decline in quality. It is expected that during the coming years growth in the programme will reduce to a better manageable level.

32. Several participants noted with satisfaction the high priority given by UNIDO in its activities to hides and skins improvement, training and environmental protection. The LEATHER UNIT was encouraged to maintain its orientation. The importance of energy utilization in tanneries and the introduction of alternative energy sources (e.g. biogas and solar) was also raised.

33. Taking into account the shortage of resources available at UNIDO HEADQUARTERS for backstopping technical assistance projects, the possibility of setting priorities for accepting additional work was discussed. In all cases, the main emphasis should be on the quality of project execution rather than increasing the volume of expenditures or the number of projects implemented. UNIDO was requested to consider sub-contracting a part of the project support work by using alternatives such as associate experts.

34. Following the recommendation made by the Director of CLRI concerning the establishment of an international institute for the leather and related industries, several participants called for strengthening of the existing institutions. The initiative of UNIDO's LEATHER UNIT regarding the establishment of co-operation among training institutes and development centres on a regional basis was welcomed. The PANEL supported the project idea proposed by UNIDO to UNDP in 1991 to launch a special project in Asia with the main objective of co-ordinating their activities and starting active collaboration in training and technology development.

IV. PRESENTATION OF BACKGROUND PAPERS AND DISCUSSIONS

Implementation of the Leather Industry Programme in Africa

35. A UNIDO staff member presented the report on the **Hides and Skins, Leather and Leather Products Improvement Scheme** (US/RAF/88/100), which summarized the implementation of the subject programme and provided information on the

development of the African leather industry from the UNIDO technical assistance point of view.

36. There was an in-depth evaluation of the programme during August/September 1990 and the results achieved were considered most encouraging. The continuation of the programme was, therefore, planned. The programme was one of the first so-called "programme approach" efforts within UNIDO's technical assistance work. This approach was strongly advocated and encouraged by the UNIDO THIRD CONSULTATION ON THE LEATHER AND LEATHER PRODUCTS INDUSTRY and subsequent LEATHER PANEL MEETINGS.

37. The panel was informed about the *problems encountered* during the implementation of the programme. These included difficulties related to dealing with several ministries with different views, inter-agency co-operation, UNDP's objection to handling the financial recording, financial controls and reporting to donors, working conditions for experts, coordination of the activities, support personnel.

38. A number of *positive trends* and some *development results* were also mentioned: there is better coordination and co-operation of the industrial sector within the region. In such a regional programme better implementation control can be exercised when the selection, recruitment and assignment of experts in target areas is handled directly by UNIDO. Thereby, better possibilities and mobility to give quick assistance for suddenly emerging needs such as providing
feasibility studies and/or economic assessments for starting new factories and/or new product lines exist. This gives better possibilities for transferring resources to deal with newly identified needs such as preparing feasibility studies, starting new factories, etc. Assistance to private industry and the establishment of revolving funds have been developed as a by-product of the programme and are creating an impact (more information in project files). Assistance is provided in locating partners for joint ventures; finding easier ways to handle technical training seminars within the region; arranging easier dissemination of results to the government authorities by a systematic approach from the technical level to government decision makers through seminars organized within the programme, addressing various issues and levels and with inter-agency co-operation; and helping to expand pilot scale operations to full programmes.

39. A concept for a second phase of the Africa programme was presented to the PANEL. In accordance with requests from the recipient countries, a certain change in the direction of work will take place. More emphasis will be given to leather finishing aspects and the manufacture of footwear and leather products.

i) Hides and skins improvement will continue and the main goal is to make the national schemes self-financing. The revolving fund system, started during the first phase and the involvement of the end users - the tanneries - through their associations will be an important new aspect in this respect.

ii) Private industry assistance and assistance in the privatization of public leather companies will continue and will even be intensified. It is intended that a **Rehabilitation and Establishment of Finished Articles Manufacturing (REFAM)** project will be included in the programme. Assistance to selected tanneries, shoe factories and leather products manufacturers will be provided against payment in local funds, to be re-funded by the recipient company to the revolving fund. The revolving fund, (established during the first phase) under the control of the local institute and/or the tanners and footwear and leather product association

will be used for hides and skins improvement activities within the country.

iii) Assistance in the application of clean technology in combination with effluent treatment and tannery waste management will be an important part of the programme. Selected tanneries will benefit directly and great importance will be given to training at a regional and country level.

iv) The integration of women in the industry is to be continued and the recommendations provided during the first phase by the project expert will be reaching the implementation stage.

40. A participant requested UNIDO to set strong quantitative targets when designing the second phase of the hides and skins improvement scheme in African countries. He also stressed the necessity of making some of the results achieved in the recipient countries available to the industry in other African countries. Finally, he suggested to set free the pricing policy on raw materials such as hides and skins.

41. The question of incentives to be provided for the agricultural and food industry sector for the improved supply of raw hides and skins was discussed in detail. UNIDO's intention to bring the hides and skins sub-sector in the assisted countries to a stage in which their development would be self-financed was endorsed by all participants. The assistance to the private industry and the revolving fund scheme established through the regional Africa programme received a great deal of support.

42. The secretary of ICT (International Council of Tanners) informed the meeting that the ICT secretariat had recommended to all its members that they support the *UNIDO Hides and Skins, Leather and Leather Improvement Scheme* and had requested its members to ask their governments to provide financial support to this joint UNIDO, FAO (Food and Agriculture Organization of the United Nations) and ITC (International Trade Centre) programme.

43. Several participants supported UNIDO in the introduction of a grading system for raw hides and skins, semi-processed and finished leather in developing countries. For such a system to be put into effect, the introduction of (international and/or regional) standards may need to be elaborated.

44. The results achieved through the regional programme should be published more widely. Technical papers (e.g. the Manual on Hides and Skins Improvement, studies, video tapes, etc.) should be distributed in other countries as well in order to assist them in their development.

45. A PANEL member underlined that the hides and skins improvement is a continuous task. UNIDO assistance, however, has to be terminated when self-sustainability is achieved in a given target area and the resources redirected to others. It is important to measure the indicators of hides and skins improvement, which may also be monitored through feedback from customers from industrialized countries.

46. A participant reminded the PANEL of the magnitude of international trade of hides and skins and their products which is higher than rice, tobacco, etc. Such a commodity cannot be regarded as a by-product and should receive the appropriate attention from the trade, industry and economy.

Tannery effluent treatment programme for South-East Asia

47. A UNIDO staff member presented the executive summary of the proposed large-scale **Sectoral Programme of Pollution Control in the Tanning Industry in the South-East Asia Region** (UNIDO project US/RAS/89/246). The technical assistance programme would include an umbrella project, supplemented with eight country projects, to be implemented in Bangladesh, China, India, Indonesia, Nepal, Pakistan, Sri Lanka and Thailand.

48. The programme is designed in a modular manner to provide flexibility not only in its execution, but also to provide room for securing funds from potential donor countries. It simultaneously addresses the issues of introducing low-waste, cleaner technology in all phases of leather processing, the utilization of by-products and end-of-pipe treatment.

49. The strategy of the regional umbrella programme is to reinforce and complement the activities of the respective national projects through the organization of training programmes, workshops and seminars at a regional level. One of the objectives is to build up a comprehensive communication system in order to ensure the full utilization of the accumulated technical know-how and experience by using up-to-date information technology. Each participating country will concentrate on specific tasks according to their features, capabilities and/or unique prevailing conditions. Consequently, institutions in the eight countries will be strengthened and used as focal points for certain aspects of environmental protection for the entire region.

50. The PANEL member from China pointed out that while the direct recipient of the programme would be the world tanning community, the target beneficiary is the whole human race, as a less polluted environment will contribute to the welfare of all people. On the other hand, the introduction of a clean technology concept needs changes in tanning processes, while the basic quality and property requirements have to be maintained. Finally the participants' attention was drawn to the importance of effluent treatment involved with pigskin processing (80 per cent of all leather produced in China today is pigskin. Germany, Yugoslavia and some other countries also manufacture a substantial amount of pigskins). In this respect the LEATHER DEVELOPMENT CENTRE (LDC), established through UNIDO technical assistance, in Shanghai can offer its research and development resources to the proposed project.

51. A participant from the United Kingdom stressed the importance of knowledge and experience in designing tannery effluent treatment plants. He informed the PANEL that according to recent research, water causes nearly 80% of diseases; therefore, appropriate water treatment would generate notable savings in medical care expenses of the regions involved. He welcomed the idea of setting up pilot treatment plants capable of demonstrating various options. In the same context he emphasized that similar training plants and facilities are also needed in industrialized countries. Finally, he called for more effort in standardization and legislation in order to avoid technically and/or ecologically unjustified over-expenditure in the industry.

52. A participant from the newly established TAMIL NADU POLLUTION CONTROL BOARD expressed his thanks for the assistance received from UNDP and UNIDO. He found the proposed programme very constructive and well formulated. He also underlined the importance of establishing an international network of centres of excellence, as a vehicle for transferring the ecologically sustainable pollution control technology to the target beneficiaries, i.e. the tanning community in developing countries.

53. Another participant reminded the PANEL of the relatively simple methods available for tackling the environmental issue in the leather industry, such as regularly visiting well-functioning plants in all parts of the World regularly, as well as introducing green fleshing. He called on the recently (re)established tanners' associations in developing countries to join the INTERNATIONAL COUNCIL OF TANNERS (ICT), which would add an important source of valuable information and experience. Finally, he expressed his conviction concerning the introduction - sooner or later - of special duties on leather imported from countries where no appropriate pollution control is used in tanneries, which in turn would certainly have a negative impact on competitiveness of some of the developing countries.

54. The PANEL member from Spain highlighted the economic aspects related to effluent treatment and the introduction of cleaner technology, as all these solutions are rather costly. Similarly, more attention should be paid to waste disposal problems, which exist in most industrialized countries - without a solution at an affordable price.

55. A participant raised the unsolved issue of maintaining common effluent treatment plants, which also seemed to be missing from the proposed sectoral programme.

56. The representative of the FAO emphasized the necessity of dealing with waste disposal problems - not only in the tanning, but also in the leather products sub-sectors. He found UNIDO's pollution control activity to be the most important and urged that more effort be concentrated in this field. He remarked on the trend seen in other industries, namely the unavoidability of incorporating the costs involved in the environmental protection while setting the price for the commodity. In addition, the leather products industries will probably be obliged to take back the used goods and find appropriate ways of disposing or recycling them. Very soon the costs associated with waste disposal and/or recycling may outgrow the costs of manufacturing new products.

57. The representative of the ILO mentioned the similarities of the proposed pollution control programme with the introduction of a cleaner working environment in industrial plants, for which an international treaty has already been signed.

Development programme for the leather-based industries in India

58. A UNIDO consultant presented a study on the *integrated approach* used in the preparation of a comprehensive subsectoral development programme for the Indian leather-related industries. The programme approach preferred by UNDP should be based on the actual status of the given industrial subsector in its entirety - with special reference to public *and* private enterprises, institutions and government control systems. The main objectives for technical development have to be derived from the government strategy set up for overall economic and social development, following the priorities agreed upon by the government and UNDP. The programme should recommend an integrated development plan, taking into consideration local efforts, bilateral and international assistance - regardless of the financial source or means.

59. The consultant outlined the information base and structure of preparatory work involved. After introducing the general trend in technology development in the world leather and leather products industry, the local conditions (potential) and the Government policy are confronted with the challenge of the local and world market. The leather-based industry development programme to be

provided through UNDP assistance is now based on the development assistance opportunities and consists of ten main elements. These components are interlinked and complement each other in many ways. The notable new feature of the integrated programme is the *incorporation of the support industries* with a view to bring them up to the level required for successful functioning of the manufacturing sector. The proposal also has a massive institution-building orientation since one of the main objectives of the programme is upgrading the local industrial potential, i.e. manufacturing capacities including its human resource component, and ensuring its sustainability.

60. The (relatively) new principle of the UNDP assistance policy, namely the promotion of *government execution of programmes* and projects was also presented. In this context the financial resources provided for industrial development are to be given - partly or entirely - to the recipient government, so that they will have the choice to involve specialized UN agencies in the execution of various components of the programme. This approach, quite naturally, will bring substantial changes to UNIDO's role in implementing technical assistance projects.

61. The representative of UNIDO finally explained that the total allocation approved by the UNDP ACTION COMMITTEE is made available for the programme and by no means for UNIDO. In the course of finalizing the *Programme Document* (DP/IND/90/040), arrangements will be made by UNDP and the GOVERNMENT OF INDIA concerning the execution of the various programme components in which UN specialized agencies may be involved.

62. The representative from the UNDP office in New Delhi explained the concept adopted by UNDP for implementing the integrated subsectoral development approach as opposed to the project oriented activities practiced until now. He briefed the participants on the history of developing the present large-scale programme for developing the leather related sector in India, including the generation of the project formulation framework by UNIDO, and the involvement of local private industry in setting the main objectives. In fact, the Indian leather-based sector is regarded as a pilot scheme for finalizing the methodology of UNDP's programme approach. He explained the new way of administrating the programme implementation, wherein the recipient government has a prominent role, and will assist in the building of industrial management capabilities in developing countries.

63. PANEL members expressed their concern over the coherency of the Indian Government's policies in terms of duties, taxes and incentives associated with importing machines and essential components, as well as exporting leather products. It was noted that if no liberalization is introduced on imports of materials, hardly any result can be expected in increasing exports of footwear and leather goods to the very demanding and highly competitive international markets. The integrated development programme has to deal with similar economic issues in order to provide the relevant government bodies with a realistic picture of business life and facilitate appropriate legislation. A tendency towards self-sufficiency of a sector resulted in a negative outcome not only in the leather-based sector in the past, while the free trade concept always brought about substantial improvements in quality, delivery terms and consequently higher earnings through export.

64. Several participants referred to the importance of the support industries, especially the leather products component manufacturing sub-sector, in achieving improved results in the export of commodities with higher value added such as footwear, leather goods and garments.

65. Two PANEL members advised that the Indian engineering industry should not start in the near future designing and manufacturing of highly sophisticated equipment or introduce a wide range of shoe machines for local production. They recommended establishing the production of an inexpensive type of equipment which could be used in small-scale, semi-mechanized plants. The documentation and know-how is readily available and the best way for its acquisition would be to enter into co-operation (e.g. joint ventures) with well-known equipment suppliers. This approach could also facilitate better after-sale services for equipment supplied by a local manufacturer and by the partner company.

66. The institution building component of the proposed integrated programme was discussed in detail. Some participants expressed their reservations concerning the establishment of new institutions, while others saw these as the vehicles for disseminating the technical know-how and experience received through international assistance throughout India.

67. Replying to the question raised by the representative of UNDP, several participants pointed out that the international private sector would show interest in providing technical assistance if free trade conditions were guaranteed in India.

Strategies of firms in the leather business

68. One of the PANEL members made a presentation of the *leather survey* prepared by UNIDO. The study deals with the structure of world production and trade, raw material supply and the market, and as such involves a rather sophisticated statistical analysis of data collected from various sources.

69. The paper on the strategies of firms in the leather-based industry sector presents a fairly original approach for determining managerial and marketing methods used - primarily in the USA - for maintaining the competitiveness of individual corporations. The survey gives a number of examples of successful marketing operations, all of which are based on well-established plans and thorough implementation of long-term policies. Although the strategies observed and/or described have been applied to conditions of a free market economy mainly in industrialized countries, they offer interesting "learning material" for enterprises in developing countries.

70. A participant from Finland explained in detail the role of marketing in industrialized countries and the up-to-date organization of product development. He stressed the necessity of proper market studies and the importance of distinguishing features of the product to be placed on the market. One of the most significant tasks today is to establish good co-operation between the leather product designers and the tanners in order to find the optimum way to change style and color and consequently to come up with a new collection which sells.

71. Another participant emphasized the skill of introducing changes associated with development, which cannot be successful without adequate preparations. Management played an prominent role, but many developing countries lack such experience. CLRI should incorporate an appropriate training system for industrial management and start rendering such services. He also called for the liberalization of product pricing and international trade in developing countries.

72. The representative of the ITC drew attention to the fact that the functional or technological perfection of a product alone is not sufficient to

guarantee success on the market. Pricing, selecting the right market segment, the new feature or the ability to create demand are in many cases more important factors. India's main objective should be to "make it cheaper".

Statistical intelligence

73. The problem of *statistical intelligence* in the leather-based industries was encountered again in the course of preparing the above-mentioned world-wide survey. One of the objectives of the on-going project US/RAF/88/100 *Regional Hides and Skins, Leather and Leather Products Improvement Scheme*, is the improvement of statistical intelligence within the eight participating countries. The experience gathered during project implementation has also clearly shown the difficulties in obtaining, storing, analyzing and disseminating such (reliable) data. Although the project has made serious attempts and spared no effort in this area, additional inputs will be needed to complement the project's work and to expand and sort out the results achieved so far.

74. During the FAO/ECDC (Economic Co-operation between Developing Countries) Workshop held in Bulawayo, FAO presented an updated statistical compendium of all African countries. It was recommended that additional work and improvements are needed in this area. It was suggested that one of the first actions should be to update the conversion factors presented by FAO in a draft compendium in 1980.

75. A UNIDO staff member presented an outline for a joint UNIDO/FAO pilot project to test suitable methodological approaches for data collection and computation for the hides, skins, leather and leather products sector. This pilot scheme should be started in selected African countries and is expected to provide improvements in the coherence of the existing database and add some new elements such as leather manufacture - other than footwear - employment, wages, input costs, value-added, etc.

V. CONCLUSIONS AND RECOMMENDATIONS

General

76. The participants recognized the efforts made by UNIDO to provide technical assistance to developing countries and noted the difficulties in maintaining the established quality level with the resources available to the LEATHER UNIT.

77. It was recommended that **priorities** be established to select projects and programmes for implementation. These should emphasize hides and skins improvement in association with FAO, effluent treatment and introduction of clean technology and human resources development. The wider use of associate experts, enabling implementation of additional projects, was also encouraged.

78. Further it was recommended that UNIDO should deal with **energy utilization** and related issues in the future. Special attention should be paid to the use of biogas and solar energy - especially in countries with a tropical climate.

79. **Strengthening and upgrading existing leather and leather products institutions** (training centres, research and development institutions, pilot and demonstration plants, etc.) was recommended instead of setting up new facilities. In this context, the proposed project involving close co-operation among the

leather institutes in China, India, Indonesia, Pakistan and the Philippines was strongly recommended, to be followed up with UNDP. Efforts should be made to start implementation as soon as possible.

80. Promoting the most successful leather (products) development institutes to (sub)regional centres should remain one of the objectives of UNIDO assistance in the field of institution building.

81. The **integrated sectoral development of leather-based industries** in developing countries received a very positive response from the PANEL. UNIDO should apply that approach when preparing its new technical activities. Whenever possible, integration should also be extended to the subregional level, facilitating better technical co-operation among developing countries (TCDC).

82. A PANEL member recommended that UNIDO includes an environmental protection component in each technical assistance project as a must.

Regional leather development in Africa

83. The PANEL noted with satisfaction the progress made by UNIDO in co-operation with UN agencies in the implementation of the hides and skins, leather and leather products development scheme in Africa. In fact, the scheme was recognized by all participants as the first successful implementation of the integrated industrial development programme - at a sub-regional level.

84. **Assistance to the private sector and the intention of making the hides and skins improvement self-sustaining** should also be maintained and adopted in other fields of technical assistance.

85. The concept presented for the **second phase of the Africa programme** was acknowledged as well justified. Work should be continued in the selected African countries. Flexibility to allocate resources to countries according to their needs and those of the industrial sectors, institutions and production units should be retained. At the same time, the programme should be extended to countries with substantial potential which did not benefit from the first phase of the programme (e.g. Botswana, Namibia, Uganda).

86. The PANEL recommended that **a meeting of a small working group**, composed of a limited number of its members, should be organized to present the programme to potential donor countries.

Regional programme for tannery effluent treatment

87. All participants agreed on the general principle, structure, scope, issues addressed, and particular targets set by the **sectoral pollution control programme** as prepared by the UNIDO LEATHER UNIT. The successful efforts made in securing funds through the Industrial Development Fund (IDF) financing scheme for associated projects, such as the one being commenced in the Tamil Nadu State of India, were commended and noted.

88. The whole programme should be presented to the pledging conference scheduled for December 1991 with the LEATHER PANEL's firm recommendation to start its implementation as soon as funds are made available.

89. Although the programme is complex and covers the main problem areas associated with ecologically-sustainable technology in the tanning industry, it

was strongly recommended that efforts be strengthened towards solving the serious **waste disposal** problems at the leather production stage as well.

90. The proposed programme has to build **appropriate databases on specific aspects of tannery pollution control** and/or facilitate access to existing databases. That information base should be maintained and made available for a wide range of institutions using up-to-date information and data-transfer technology.

Integrated development of the Indian leather-based industry

91. The **sectoral programme development approach** introduced by UNDP and initiated in co-operation with UNIDO in the Indian leather and leather products development, was welcomed by all participants.

92. Recognizing the capabilities of the LEATHER UNIT and the results achieved with its assistance in past decades in a large number of developing countries, it was strongly recommended by the LEATHER PANEL that **UNIDO be involved as much as possible** not only in the development, but also in the execution of the programme. The expertise and backstopping potential of specialized UN agencies, especially within ITC and UNIDO, should be utilized to the maximum extent by this Indian Government-executed project. Clear-cut authorities and responsibilities should be worked out and agreed upon for the implementation of the various programme components between the Government, UNDP and the specialized agencies involved.

Strategies of firms

93. While technical aspects of leather processing and leather products manufacturing are frequently covered in developing countries, **managerial skill development** is, in many cases, neglected. Thus, the PANEL recommended to UNIDO and other specialized agencies that they focus their activities in human resources development on management training for plant supervisors and high level executives on development of entrepreneurial skills development. Emphasis should also be placed on the promotion of small and medium-sized firms.

94. The PANEL recognized the **importance of marketing** and the need of developing countries to adopt the strategies that have been used to develop markets world-wide. The PANEL emphasized that UNIDO and ITC should assist in investigating suitable strategies.

95. Governments in developing countries should be made aware of the many disadvantages they bring to industrial development by restrictive policies. Much of the effort being put into developing exports of leather products is negated by such things as prohibitive import duties, bans on the export of certain materials, restrictions on larger companies entering the industry, etc. It is proposed that in the programme, a number of studies should be prepared by well-known international experts and institutions in co-operation with representatives from the private sector. These reports could provide a suitable means for identifying the policies which cause damage, and quantifying the harm done.

Contribution of other agencies

96. Regarding statistical issues, the Panel complimented FAO on its continuing efforts to improve its global data base on production, trade and utilization of hides and skins and their derived products. It endorsed the initiative, jointly

taken by UNIDO and FAO, to embark on a pilot project as mentioned in paragraph 75 above, in a number of African countries forming a part of the Regional project, with a view to **test suitable novel methodological approaches for data computation and comparison and to examine their computer adaptability**. This pilot scheme was expected to lead to improvements in the coherence of the existing data base and incorporate in it some new elements, including leather manufactures other than footwear, employment, wages, input costs, added value, etc. The hope was expressed that the pilot scheme would also enable easier direct access to computer stored data.

97. It was recommended by some Panel members that until such a time as results of the initiative suggested in paragraph 34 above, become available, **FAO should publish more regularly up-dated editions of its world compendium**.

98. The PANEL also encouraged FAO to **present the project proposals** mentioned in paragraph 24 above on hides and skins improvement in Africa including some R&D components, and on marketing information and advisory service schemes formulated by ITC together with FAO, to the forthcoming session of the Sub-Group on Hides and Skins for eventual sponsoring and financing by the Common Fund for Commodities.

99. The PANEL recommended that ILO strengthen its programme for the improvement of the working environment and place emphasis on the leather industry.

Follow-up

100. All participants recognized the importance and effectiveness of LEATHER PANEL meetings and recommended that UNIDO continue convening the Panel on a regular basis. It was proposed that the **next meeting should be held in 1992 and that a consultation meeting at a global level** should be organized, preferably in South-East Asia, in 1994.

Annex I

LIST OF PARTICIPANTS

AFRICA

Mr. R.O. Arunga
Director
KENYA INDUSTRIAL RESEARCH AND DEVELOPMENT INSTITUTE (KIRDI)
Dunga Road, P.O. Box 30650
Nairobi, KENYA

Telex: 25624 unrele ke
Phone: 557988, 557762
Fax:
Cable: REDEV NAIROBI

Mr. F.A. Lawal
National Project Co-ordinator
NATIONAL RESEARCH INSTITUTE FOR CHEMICAL TECHNOLOGY
P.M.B. 1052, Zaria, NIGERIA

Telex: 75248 nite zng
Phone: (069) 50514
Fax:
Cable: LEATHER ZARIA

ARAB COUNTRIES

Mr. Yehia Al-Mokadem
Chairman
EL-NASR TANNING CO.
423 Horria Street Rossdy
Alexandria, EGYPT

Telex: 54088/NTC/UN
Phone: 4828911, 4828949
Fax: (03) 4822718
Cable: GILNASR ALEX

ASIA

Mr. Sanjoy Sen
President
INDIAN LEATHER TECHNOLOGISTS' ASSOCIATION
Mercantile Buildings, "B" Block - First floor
9, Lall Bazar Street, P.O.Box 402
Calcutta 700 001, INDIA

Telex: 021-7272 spl in
Phone: 28-7838, 28-7874
Fax:
Cable:

Mr. Shi Xiang Lin
Senior Adviser
LEATHER TECHNOLOGY CENTRE (LDC)
33, Si-Chuan Road
Shanghai, CHINA

Telex: 33271 ltc cn
Phone: 4314614
Fax: (+8621) 3213077
Cable:

LATIN AMERICA

Mr. Juan Francisco Hernandez
Chief of Leather Department
CENTRO DE INVESTIGACIÓN Y ASISTENCIA TECNOLÓGICA DEL ESTADO DE GTO. A.C. (CIATEG)
Omega 201 Fracc. Delta, Apartado Postal 890
León, Gto., MEXICO

Telex: bnceme 120457
Phone: 3-13-15, 4-20-87
Fax: (471) 4-76-16
Cable:

EUROPE

Mr. Andrés Colomer
President
COLOMER MUNMANY, S.A.
Aptdo. Correos 15, Sant Francesc, 1, 08500 VIC
Barcelona, SPAIN

Telex: 52098 skin-e
Phone: (93) 885 17 00
Fax: (00343) 885 16 00
Cable: MUNMANY-VIC

Mr. Anthony Clothier
Consultant
5 Market Place
Wells, Somerset BA5 2R, ENGLAND

Telex: 445 666 frith g
Phone: (0749) 74241
Fax: (0749) 74070
Cable:

Mr. Pertti Hellemaa
Chairman
FRIITALA GROUP, FRIITALA FASHION LTD.
P.O.Box 5
SF-28401 Ulvila, FINLAND

Telex: 66176 frila sf
Phone: (358-39) 388300
Fax: (00358-39)387 237
Cable:

Mr. Otto Kloetzer
Senior UNIDO Consultant
Koolkerkesteenweg 1
8350 Damme, BELGIUM

Telex:
Phone: (0032) 050-332714
Fax:
Cable:

Mr. Guy Reaks
Secretary
INTERNATIONAL COUNCIL OF TANNERS
186 High Street
Lewes, East Sussex BN7 1XX, ENGLAND

Telex: 878149 bricen g
Phone: (44 273) 472149
Fax: (44 273) 472149
Cable:

Mr. Pietro Torielli
President
TORIELLI RAG. PIETRO & C.S.P.A.
Corso Torino 127
27029 Vigevano, ITALY

Telex: 334336
Phone: (0381) 81101-5
Fax: (0039)381-88298
Cable: TORIELLI VIGEVANO

Observers

Mr. Sergei Borisov
Project Manager
SCIENTIFIC-INDUSTRIAL ASSOCIATION "ANALYT"
M. Ulianovoy St. 16-1
117331 Moscow, USSR

Telex:
Phone: 298-50-41
Fax: 298-50-41
Cable:

Mr. Viktor Gavrikov
Scientific Adviser
SCIENTIFIC-INDUSTRIAL ASSOCIATION "ANALYT"
M. Ulianovoy St. 16-1
Moscow, USSR

Telex:
Phone: 298-50-41
Fax: 298-50-41
Cable:

Mr. Wang Zhenhe
Programme Officer
DEPARTMENT OF INTERNATIONAL ECONOMIC CO-OPERATION
MINISTRY OF LIGHT INDUSTRY
No. 22 B. Fuwaidajie
Beijing, CHINA

Telex: 222717
Phone: 8033251
Fax: 8322976
Cable: LIGHTIND OR 6535

Ms. Song Xian Wen
Researcher
LEATHER TECHNOLOGY CENTRE
33, Si-Chuan Road
Shanghai, CHINA

Telex: 33271 ltc cn
Phone:
Fax: (+8621) 3213077
Cable:

Representatives from India

Mr. P.M. Belliappa
Chairman
TAMIL NADU POLLUTION CONTROL BOARD
Santhome High Road
Madras-600004, INDIA

Telex:
Phone: 8253241
Fax: 91-44-862608
Cable:

Mr. J.K. Khanna
Deputy Director
CENTRAL LEATHER RESEARCH INSTITUTE (CLRI)
Adyar, Madras-600020, INDIA

Telex: 041-21014 clri in
Phone: 418730, 412616
Fax: (91) 044-411589
Cable: LESERCH

Mr. P. Prabhakaran
Executive Director
COUNCIL FOR LEATHER EXPORT (CLE)
53, Sydenhams Road
Madras-600003, INDIA

Telex: 41-7354 cle in
Phone: 589098, 582041
Fax: 91-44-588713
Cable: LEXPROCIL

Mr. Swaminath Raja
Editor
JOURNAL "LEATHERWARE"
3069, 11th Cross, 11th Main Hall, 2nd Etage
Bangalore-560008, INDIA

Telex: 0845-8600 csci in
Phone: 543410
Fax:
Cable:

Mr. T. Ramasami
Deputy Director
CENTRAL LEATHER RESEARCH INSTITUTE (CLRI)
Adyar, Madras-600020, INDIA

Telex: 041-21014 clri in
Phone: 410246, 412616
Fax: (91) 044-411589
Cable: LESERCH

Mr. D.L.V. Rao
Scientist
CENTRAL LEATHER RESEARCH INSTITUTE (CLRI)
Adyar, Madras-600020, INDIA

Telex: 041-21014 clri in
Phone: 412616
Fax: (91) 044-411589
Cable: LESERCH

Mr. K. Seshagiri Rao
Deputy Director
CENTRAL LEATHER RESEARCH INSTITUTE (CLRI)
Adyar, Madras-600020, INDIA

Telex: 041-21014 clri in
Phone: 411399
Fax: (91) 044-411589
Cable: LESERCH

Mr. G. Rengasamy
Member Secretary
TAMIL NADU POLLUTION CONTROL BOARD
Santhome High Road
Madras-600004, INDIA

Telex:
Phone: 8253241
Fax: 91-44-862608
Cable:

Mr. G. Thyagarajan
Director General
CENTRAL LEATHER RESEARCH INSTITUTE (CLRI)
Adyar, Madras-600020, INDIA

Telex: 041-21014 clri in
Phone: 412616
Fax: (91) 044-411589
Cable: LESERCH

Consultants

Mr. Timo Niklas-Salminen
Consultant
Tuomiokirkonkatu 38 B8
SF-33100 Tamper, FINLAND

Telex: 22366 finaw sf
Phone: (00538 31) 126809
Fax:

Mr. Zdenek Kotasek
Chief Technical Adviser (CTA)
226/1 Lower Circular Road
Calcutta 7000020, INDIA

Telex:
Phone: 478754
Fax:

United Nations

United Nations Development Programme (UNDP)

Mr. Matiul Islam
UNIDO Country Director UCD)
55, Lodi Estate, Post Box No. 3059
New Delhi-110003 INDIA

Telex: 31-61652 undp-in
Phone: 4628877
Fax: 91-11-4627612
Cable: UNDEVPRO, New Delhi

Mr. M. Ramachandran
Programme Officer
55, Lodi Estate, Post Box No. 3059
New Delhi, INDIA

Telex: 31-61652 undp-in
Phone: 4628877
Fax: 91-11-4627612
Cable: UNDEVPRO, New Delhi

Food and Agriculture Organization of the United Nations (FAO)

Mr. W.A. Lamade
Senior Commodity Specialist
COMMODITIES & TRADE DIVISION
Via delle Terme di Caracalla
00100 Rome, ITALY

Telex:
Phone: 57973712
Fax:
Cable:

International Trade Centre UNCTAD/GATT (ITC)

Mr. R. Sauer
Senior Market Development Officer
MARKET DEVELOPMENT SECTION FOR MANUFACTURED PRODUCTS
DIVISION OF PRODUCT AND MARKET DEVELOPMENT
Palais des Nations
CH-1211 Geneva 10, SWITZERLAND

Telex: 414118 mtc ch
Phone: 022-7300534
Fax: 022-7337176
Cable:

International Labour Organisation (ILO)

Mr. K. Ebel
Leather and Footwear Specialist
INDUSTRIAL ACTIVITIES BRANCH
4, route des Morillons
1211 Geneva 22, SWITZERLAND

Telex:
Phone: (022) 7997462
Fax:
Cable:

Annex II

PROGRAMME

Monday, 4 November 1991

9:00 - 9:30	Registration
9:30 - 10:00	Opening of the session -- Opening of the meeting by *Mr. G. Thyagarajan*, Director of the CENTRAL LEATHER RESEARCH INSTITUTE (CLRI) -- Opening statement by *Mr. Sabater de Sabatés*, Representative of the UNIDO SYSTEM OF CONSULTATIONS DIVISION
10:00 - 10:30	Election of Chairman, Vice-chairman, Rapporteur
10:45 - 11:15	Report on UNIDO's technical assistance activities in 1988-1991 (by *Mr. J. Berg*)
11:15 - 12:00	Discussion on the UNIDO report
14:00 - 15:00	Report on the Regional African Hides and Skins, Leather and Leather Products Improvement Scheme (by *Mr. J. Berg*)
15:00 - 15:30	Discussion on the leather improvement scheme
15:45 - 17:00	Presentation of a videotape on the progress of implementation of the hides and skins improvement scheme in Africa (prepared by UNIDO)

Tuesday, 5 November 1991

9:00 - 10:00	Presentation of the sectoral programme for pollution control in the tanning industry in the South-East Asian region (by *Mr. J. Buljan*)
10:00 - 10:30	Discussion on tannery effluent treatment and pollution control
10:45 - 12:00	Continuation of discussion on tannery effluent treatment
14:00 - 14:30	Presentation of the integrated development programme for the leather-based industries in India (by *Mr. T. Niklas Salminen*)
14:30 - 15:30	Discussion on the Indian leather industry development programme
15:45 - 16:15	Presentation of strategies of firms in the leather business (by *Mr. G. Reaks*)
16:15 - 17:00	Discussion on strategies of firms

Wednesday, 6 November 1991

9:00 - 10:30	General discussions on the problems connected with the development of the leather industry
10:45 - 12:00	Continuation of general discussions
14:00 - 15:45	Contributions by other agencies including the CLRI and observers
16:00 - 17:00	Contributions continued

Thursday, 7 November 1991

9:00 - 10:30	Discussion and drawing-up of conclusions and recommendations
10:45 - 12:00	Continuation of discussions and drawing-up of conclusions and recommendations
14:00	Visit to CLRI, a tannery and leather goods factories by participants

Friday, 8 November 1991

9:00 - 10:30	Discussion and adoption of conclusions and recommendations
10:45 - 12:00	Continuation of discussions and adoption of conclusions and recommendations
14:00	Other business and informal contacts among participants

Annex III

LIST OF DOCUMENTS

Aide-mémoire	--
Provisional agenda	--
Provisional work programme	--
Provisional list of participants	--
Sectoral Programme of Pollution Control in the Tanning Industry in the South-East Asia Region and Discussion Paper	ID/WG.520/1 (SPEC.)
Report on the Implementation of the Regional Programme on Hides and Skins, Leather and Leather Products Improvement Scheme (US/RAF/88/100) and Discussion Paper	ID/WG.520/2 (SPEC.)
Development Programme for the Leather-based Industries in India and Discussion Paper	ID/WG.520/3 (SPEC.)
Strategies of Firms in the Leather Business and Discussion Paper	ID/WG.520/4 (SPEC.)
Strategic Aspects of the Leather Business	ID/WG.520/5 (SPEC.)
Typical Tannery Effluent and Residual Sludge Treatment	ID/WG.520/6 (SPEC.)
UNIDO Technical Assistance Activities in the Field of Leather and Leather Products as at End December 1990	ID/WG.520/7 (SPEC.)
Leather Industry - Case Study No. 3	ID/WG.516/10